YOUR 2013 WATER QUALITY REPORT

AGUA FRIA DISTRICT

epcor.com

PWS ID 0407695

EPCOR WATER

Safety. Quality. Community. You'll hear these words spoken often around EPCOR.

For EPCOR, being your water and wastewater utility is more than providing a service. The communities that we serve – your community – are our homes, too.

We take great pride in being your neighborhood utility and the quality of life and the quality of the water is important to us at a personal level. At EPCOR, taking care of you and your water supply is serious business. Providing high-quality, safe, reliable water—and protecting it for future generations—is an important part of what we do every day.

That's a responsibility we don't take for granted, and that's why you're receiving this report.

Each year we send you a summary of the results obtained from testing your water in state-certified drinking water analysis labs. And we'll tell you what that analysis means.

In 2013, the water that EPCOR Water provided to you surpassed or met all federal and state primary drinking water quality regulations.

We're proud of this record, and we're dedicated to upholding these results.

If you have questions about this report, our Customer Care team is here to help 24 hours a day, seven days a week. You can call us at 1-800-383-0834 or email us at mywater@epcor.com.

Thank you for caring about your water and for helping us to protect and manage the water we deliver to you. We invite you to learn more about your community's water and being water wise at epcor.com.

Sincerely,

Joe Gysel
President, EPCOR Water (USA) Inc.

ABOUT THIS REPORT

YOU WANT TO KNOW WHAT'S IN THE WATER YOU'RE DRINKING

As your water service provider, we're committed to ensuring the quality and safety of that water. That's why you are receiving this annual water quality report from us. We hope it will help you understand your community's water a little better and what we're doing to protect it.

WHAT WILL I FIND IN THIS REPORT?

This report complies with state and U.S. Environmental Protection Agency (EPA) drinking water regulations.

In it you'll find information on:

- **Where your water comes from**
- **Protecting your water**
- **What's in your water**

The information in this report is compiled from data from labs certified in drinking water analysis.

READ THIS REPORT – AND SHARE IT!

Reading this report and understanding your community's water is the first step. But it's also important to share this information with those who might not receive it directly. Please share the report with water users in your community if you're a landlord, business, school or hospital.

QUESTIONS?

EPCOR Water Customer Care:
1-800-383-0834/mywater@epcor.com
Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien.
1-800-383-0834/mywater@epcor.com.

ABOUT YOUR WATER
AGUA FRIA DISTRICT

ABOUT YOUR DISTRICT

- EPCOR provides water and/or wastewater service to approximately 40,400 billed customers.
- This service area covers parts of multiple cities and towns in the West Valley of metropolitan Phoenix, as well as master-planned communities in currently unincorporated areas of Maricopa County.
- EPCOR also provides wastewater service to approximately 5,730 customers in the West Valley, including customer connections in Verrado, Russell Ranch, Corta Bella, and Sun City West.

WHERE YOUR WATER COMES FROM

- The Colorado River via the Central Arizona Project (CAP)
- Groundwater pumped from the West Salt River Valley (WSRV) Sub-Basin

About your CAP water

- Primarily Colorado River water delivered from Lake Havasu via the CAP Canal and the Beardsley Canal

GROUNDWATER WELLS – AND PROTECTING THEM TOGETHER

About the West Salt River Valley (WSRV) Sub-Basin

- A broad, gently sloping alluvial plain with the following boundaries:
  North: Hieroglyphic Mountains and Hedgpeth Hill
  South: South Mountains, Estrella Mountains and Buckeye Hills
  West: White Tank Mountains
  East: Union Hills, Phoenix Mountains and Papago Buttes
- Depth to groundwater in the WSRV Sub-Basin varies from 150 to more than 500 feet
- Sources of groundwater include natural recharge from flood flows in streams and along mountain fronts and incidental recharge from agricultural and urban irrigation, canals, effluent and artificial lakes

How we protect your groundwater

We protect water sources by ensuring proper well construction and system operations and management.

How you can help

Properly dispose of hazardous household chemicals on hazardous material collection days and limit your pesticide and fertilizer use.

For information on household hazardous material collection days in your area, contact **City of Surprise Public Works: 623-222-6000 / Town of Buckeye: www.swm.maricopa.gov / earth911/org.**

NOTICE OF SOURCE WATER ASSESSMENT

In 2004, the Arizona Department of Environmental Quality (ADEQ) completed a source water assessment for 15 wells used by EPCOR-Agua Fria. The assessment reviewed the adjacent land uses that may pose a potential risk to the sources. These risks include, but are not limited to, gas stations, landfills, dry cleaners, agriculture fields, wastewater treatment plants and mining activities. Once ADEQ identified the adjacent land uses, they were ranked as to their potential to affect the water sources. The results of the assessment were that six wells had adjacent land uses that posed no risk, 10 wells had one adjacent land use that posed a low risk, and two wells had one adjacent land use that posed a high risk.

The complete assessment is available for inspection at the Arizona Department of Environmental Quality, 1110 W. Washington, Phoenix, AZ 85007, between the hours of 8 a.m. and 5 p.m. Electronic copies are available from **ADEQ** at **dml@azdeq.gov.**

For more information please contact **ADEQ** at **602-771-4560** or visit **www.azdeq.gov/environ/water/dw/swap.html.**

WHAT YOU CAN EXPECT TO FIND IN YOUR WATER

SOURCES OF DRINKING WATER

The sources of drinking water—both tap water and bottled water—include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over land surfaces or through the ground, it can acquire naturally occurring minerals. In some cases it can also acquire radioactive material and substances resulting from the presence of animals or from human activity.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of these contaminants does not necessarily indicate that the water poses a health risk.

More information about contaminants and potential health effects can be obtained by calling the **EPA's Safe Drinking Water Hotline** at **1-800-426-4791**.

ENSURING YOUR WATER IS SAFE

To ensure that tap water is safe to drink, the EPA prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. To ensure bottled water is safe to drink, U.S. Food and Drug Administration regulations establish limits for contaminants in bottled water.

SUBSTANCES THAT MAY BE PRESENT IN SOURCE WATER

Microbial Contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations or wildlife.

Inorganic Contaminants, such as salts and metals, which can be naturally occurring or may result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.

Pesticides and Herbicides, which may come from a variety of sources, such as agriculture, urban stormwater runoff and residential uses.

Organic Chemical Contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and may also come from gas stations, urban stormwater runoff and septic systems.

Radioactive Contaminants, which can be naturally occurring or may be the result of oil and gas production and mining activities.

WHAT YOU CAN EXPECT TO FIND IN YOUR WATER

SPECIAL HEALTH INFORMATION

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly and infants may be particularly at risk from infections. These people should seek advice about drinking water from their healthcare providers. EPA/CDC (Centers for Disease Control and Prevention) guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbial contaminants are available from the EPA's Safe Drinking Water Hotline at 1-800-426-4791.

Lead

EPCOR monitored the water for lead and copper in 2013 at 30 residences throughout the community and met the federal lead and copper standards. The 30 houses sampled were representative of the types of houses throughout the system. If your house was sampled you would have received the analysis results. If you weren't part of the representative sampling and are concerned about elevated lead levels in your home's water, you may wish to flush your tap for 30 seconds to 2 minutes before using the water. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the **EPA's Safe Drinking Water Hotline** or at: **http://www.epa.gov/safewater/lead**

White Tanks Water Treatment Facility

The Agua Fria district receives treated, renewable surface water from the White Tanks Water Treatment Facility (White Tanks). This renewable surface water is Colorado River water that's delivered through the CAP canal. Using this renewable water source is an important step in making our communities more sustainable. In fact, White Tanks saves billions of gallons of Arizona's limited and precious groundwater each year.

Seasonal changes in hardness and taste

Because your water supply contains both surface water and groundwater, you may experience seasonal changes in the hardness and the taste of your water. The hardness and taste difference between surface water and groundwater is normal and completely safe.

HOME WATER TREATMENT UNITS

Failure to perform maintenance on your home water treatment unit can result in poor water quality.

If you installed a home water treatment system such as a water softener or reverse osmosis system to improve taste or odor, remember to follow the manufacturer's instructions on operation and maintenance. For more information, contact the manufacturer of your treatment system for maintenance instructions or assistance. Additional information about home water treatment systems is available from the **Arizona Water Quality Association at 480-947-9850** or by writing to 6819 E. Diamond St., Scottsdale, AZ 85257.

FREQUENTLY ASKED QUESTIONS

WHY IS CHLORINE ADDED TO MY DRINKING WATER?

Chlorine is added to your water for your protection and is used as a disinfectant to ensure that harmful organisms such as bacteria and viruses are destroyed in the treatment process.

WILL MY HOME TREATMENT DEVICE REMOVE CHLORINE?

Some home treatment devices can remove chlorine. Once chlorine is removed, the water should be treated like any other food and used as quickly as possible. We recommend that you follow the manufacturer's instructions for maintaining the device to ensure water quality.

ARE THERE OTHER WAYS TO REMOVE THE CHLORINE TASTE OR SMELL FROM MY WATER?

To remove the taste of chlorine from your water, try these tips:

- Place water in a glass container in the refrigerator overnight, uncovered. This will let the chlorine dissipate
- Bring your water to a rolling boil for five minutes and let it stand to cool
- Add a slice of lemon or a few drops of lemon juice to your glass of drinking water

WHAT IS THE WHITE OR COLORED CRYSTAL DEPOSIT ON MY DISHES OR FAUCETS?

In most cases, the crystals or sediments left behind after water evaporates are calcium carbonate. The amount of calcium in the water is referred to as hardness.

Cleaning with white vinegar can help to dissolve and remove crystal deposits. Using a commercial conditioner, liquid detergents or the "air-dry" option in dishwashers can help to decrease the calcium carbonate found on dishes.

ARE THE CRYSTALS OR WATER HARDNESS HARMFUL?

Hardness and/or crystals don't pose a health concern and can be beneficial to our customer's health. We don't treat drinking water for water hardness that can result in crystals.

WHAT IS THE LEVEL OF HARDNESS IN MY WATER?

The hardness in your water ranges from 1.4 to 16 grains per gallon (gpg).

The degrees of water hardness are as follows:

Degree of water hardness	Range (gpg)
Soft	Less than 1
Slightly Hard	1.0 to 3.4
Moderately Hard	3.5 to 6.9
Hard	7.0 to 10.4
Very Hard	Greater than 10.5

DEFINITION OF TERMS

gpg (grains per gallon): Used to describe the dissolved hardness minerals contained in water and is a unit of weight that equals 1/7,000 of a pound.

MCL (Maximum Contaminant Level): The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

MCLG (Maximum Contaminant Level Goal): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

MRDL (Maximum Residual Disinfectant Level): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

MRDLG (Maximum Residual Disinfectant Level Goal): The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

TT (Treatment Technique): A required process intended to reduce the level of a contaminant in drinking water.

AL (Action Level): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

N/A: Not Applicable.

ND: None Detected.

NTU: Nephelometric turbidity units.

pCi/L (Picocuries per Liter): Measurement of the natural rate of disintegration of radioactive contaminants in water (also beta particles).

ppb (Parts per Billion): One part substance per billion parts water (or micrograms per liter).

ppm (Parts per Million): One part substance per million parts water (or milligrams per liter).

ppt (Parts per Trillion): One part substance per trillion parts water (or nanograms per liter).

UCMR (Unregulated Contaminant Monitoring Rule): Unregulated substances are measured, but maximum contaminant levels have not been established by the government.

TTHM (Total Trihalomethanes): Consist of Chloroform, Bromoform, Bromodichloromethane and Dibromochloromethane.

HAA5 (Haloacetic Acids): Consist of Monochloroacetic Acid, Dichloroacetic Acid, Trichloroacetic Acid, Bromoacetic Acid and Dibromoacetic Acid.

SMCL (Secondary Maximum Contaminant Level): Non-enforceable guidelines regulating contaminants that may cause cosmetic or aesthetic effects in drinking water.

Total Dissolved Solids: An overall indicator of the amount of minerals in water.

MNR: Monitored, not regulated.

WHAT'S IN YOUR WATER

HOW TO READ YOUR WATER QUALITY TABLE

Below, you'll see an analysis of your drinking water.
Here's an example of how to read these tables:

Substance (units)	Year Sampled	MCLG	MCL	Highest Amount Detected	Range of Detections	Compliance Achieved	Typical Sources
Start here and read across	2013 or year prior	The goal level for that substance	Highest level of substance allowed	Highest amount that was found	Highest and lowest amounts found	Yes means the amount found is below gov't requirements	Where substance usually originates

YOUR WATER QUALITY TABLE

The data shown in the tables below are results from commercial laboratories certified in drinking water analysis by the Arizona Department of Health Services.

The table shows what substances were detected in your drinking water during 2013 or the last required sampling period.

Regulated Substances Measured on the Water Leaving the Treatment Facility

Substance (units)	Year Sampled	MCLG	MCL	Highest Amount Detected	Range of Detections	Compliance Achieved	Typical Sources
Arsenic (ppb)	2013	0	10	8.9[1]	1.4 – 8.9	YES	Erosion of natural deposits
Barium (ppb)	2013	2000	2000	110	100 - 110	YES	Erosion of natural deposits
Fluoride (ppm)	2013	4.0	4.0	0.9	0.3- 0.9	YES	Erosion of natural deposits
Nitrate (ppm)	2013	10	10	5.2[2]	ND - 5.2	YES	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Selenium (ppb)	2013	50	50	4	3.6 - 4	YES	Erosion of natural deposits
Alpha Emitters (pCi/L)	2011	0	15	5.8	2.1 - 5.8	YES	Erosion of natural deposits; Certain minerals contain/emit this radiation form

Turbidity[3] – A Measure of the Clarity of the Water at the Treatment Facility

Plant	Year Sampled	TT	Highest Single Measurement	Compliance Achieved	Typical Sources
Highest single turbidity measurement	2013	1 NTU	0.28 NTU	YES	Soil run-off
% Monthly samples < 0.3 NTU (%)	2013	95% of samples < 0.3 NTU	100%	YES	Soil run-off

WHAT'S IN YOUR WATER

Regulated Substances Measured in the Distribution System

Substance (units)	Year Sampled	MCLG/ MRDLG	MCL/ MRDL	Annual Average	Range of Detections	Compliance Achieved	Typical Sources
TTHMs (ppb)	2013	NA[4]	80	42	ND - 118[5]	YES	By-product of drinking water disinfection
HAA_5 (ppb)	2013	NA[4]	60	13	ND - 30	YES	By-product of drinking water disinfection
Chlorine residual (ppm)	2013	4	4.0	0.8	0.07 - 1.6	YES	Water additive used to control microbes

Tap Water Samples: Lead and Copper Results

Substance (units)	Year Sampled	MCLG	Action Level	Number of Samples	90th Percentile	Number of Samples above Action Level	Compliance Achieved	Typical Sources
Copper (ppm)	2013	1.3	1.3	30	0.1	0	YES	Corrosion of household plumbing systems; erosion of natural deposits
Lead (ppb)	2013	0	15	30	ND	0	YES	Corrosion of household plumbing systems; erosion of natural deposits

Unregulated Contaminant Monitoring Rule Substances Measured at Treatment Facility and in Distribution System

Substance (units)	Year Sampled	Range of Detections	Typical Sources
Bromochloromethane (ppb)	2013	ND - 0.13	By-product of drinking water disinfection
Chlorate (ppb)	2013	ND - 400	Erosion of natural deposits
Chromium VI (ppb)	2013	ND - 62	Erosion of natural deposits
Molybdenum (ppb)	2013	3.8 - 7.4	Erosion of natural deposits
Strontium (ppm)	2013	0.81-1.5	Erosion of natural deposits
Vanadium (ppb)	2013	1.9 - 35.3	Erosion of natural deposits

WHAT'S IN YOUR WATER

Unregulated Substances Measured on the Water Leaving the Treatment Facility

Substance (units)	Year Sampled	Range of Detections	Typical Sources
Aluminum (ppm)	2010	ND - 0.024	Erosion of aluminum bearing-minerals
Calcium (ppm)	2013	7 - 67	Erosion of natural deposits
Chloride (ppm)	2010	96 - 108	Erosion of natural deposits
Hardness (gpg)	2013	1.4 – 16	Natural Calcium/Magnesium content
Magnesium (ppm)	2013	2 - 24	Erosion of natural deposits
Manganese (ppm)	2010	ND - 0.019	Erosion of natural deposits
pH (standard units)	2013	7.8 – 8.8	pH is a measure of acid/base properties
Sodium (ppm)	2013	90 - 91	Erosion of natural deposits
Sulfate (ppm)	2010	216 - 248	Erosion of natural deposits
Total dissolved solids	2013	169 - 540	Erosion of natural deposits

[1]**Arsenic:** EPCOR Water's arsenic removal facility continues to produce water with arsenic levels below the current federal and state standards. While your drinking water meets EPA's standard for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

[2]**Nitrate:** Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant you should seek advice from your healthcare provider.

[3]**Turbidity** has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea and associated headaches.

[4]**TTHM/HAA5:** Although there is no collective MCLG for this contaminant group, there are individual MCLGs for some of the individual contaminants: Trihalomethanes: bromodichloromethane (zero); bromoform (zero); chloroform (0.07mg/L); dibromochloromethane (0.06 mg/L). Haloacetic Acids: Dichloroacetic Acid (zero); Trichloroacetic Acid (0.02mg/L). Monochloroacetic Acid (0.07mg/L), Bromoacetic Acid and Dibromoacetic Acid are regulated with this group but have no MCLGs.

[5]**TTHM/HAA5:** Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

ADDITIONAL MONITORING

In addition to the parameters listed in this table, other parameters were monitored for, including regulated pesticides, herbicides, petroleum by-products and metals. None of those parameters were detected in the water.

If you have any questions about this report or your drinking water, please call our **Customer Care** team at **1-800-383-0834**.

EPCOR WATER

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